

Willamalane District-Wide Natural Resource Areas Management Plan

Purpose:

- Provide guidance for management and use of District-owned natural resource areas
- Define ecological communities and context
- Evaluate and prioritize resources





Natural Resource Area

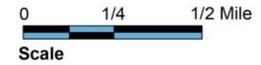
- Willamalane owned and managed
- Valued and managed for natural resource function (e.g. habitats, water quality function, visual quality)
- Provides opportunities for nature-based recreation, education, and research.



Natural Resource Areas Management Plan - Context Map

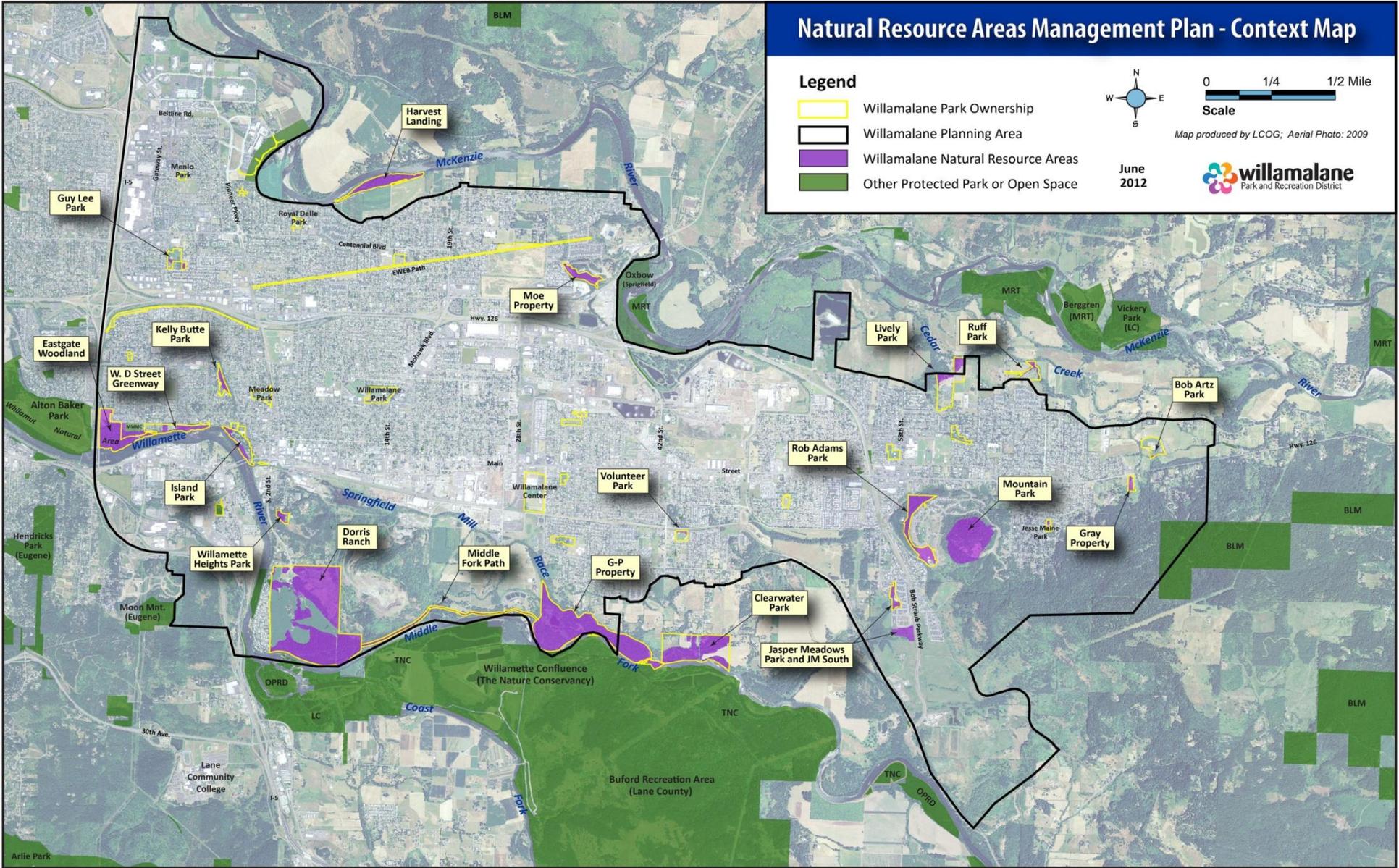
Legend

- Willamalane Park Ownership
- Willamalane Planning Area
- Willamalane Natural Resource Areas
- Other Protected Park or Open Space



Map produced by LCOG; Aerial Photo: 2009

June 2012



Willamalane Natural Resource Areas

Willamalane: 43 parks, 783 acres
 -494 acres of natural resource area (18 parks)
 -Plus ~70 acres with Moe Property and Mountain Park

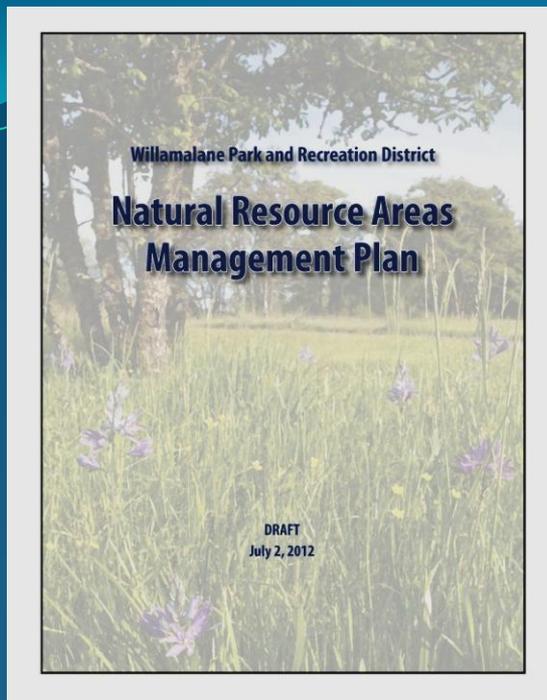


Planning Team:

- Greg Hyde, NRAMP Project Manager
- Bob Keefer, Superintendent
- Jason Genck, Deputy Superintendent
- Nicole Ankeney, Landscape Architect
- Laura Carter, Community Recreation Supervisor
- Damon Crume, Horticulture Program Manager
- Joel Miller, Park Services Division Director
- Sean O'Brien, Park Specialist

Technical Advisory Committee:

- Amy Chinitz, Springfield Utility Board
- Elise Ferrarese, Middle Fork Willamette Watershed Council
- Mark Metzger, City of Springfield – Planning
- Todd Miller, City of Springfield – Environmental Services
- Eve Montanaro, Middle Fork Willamette Watershed Council
- John Moriarty, Lane County Public Works
- Bruce Newhouse, Salix Associates
- Jason Nuckols, The Nature Conservancy
- Ryan Ruggiero, McKenzie River Trust
- Larry Six, McKenzie Watershed Council
- Trevor Taylor, City of Eugene Parks and Open Space Division
- Jeff Ziller, Oregon Department of Fish and Wildlife



Plan Organization:

- 1.0 Background and Purpose
- 2.0 Ecological Setting and Regional Context
- 3.0 Natural Resource Areas Function and Value Assessment
- 4.0 Goals, Objectives, and Recommended Actions and Strategies
- 5.0 Management Planning Guidelines
- 6.0 Prioritization of Actions
- 7.0 Guidance for Future Natural Resource Areas Acquisition

2.0

Ecological Setting

Willamette Valley Ecoregion

Derived From:

- Oregon Conservation Strategy (ODFW)
- Ecoregional Assessment (TNC)
- South Ridgeline Habitat Study (Salix Associates)

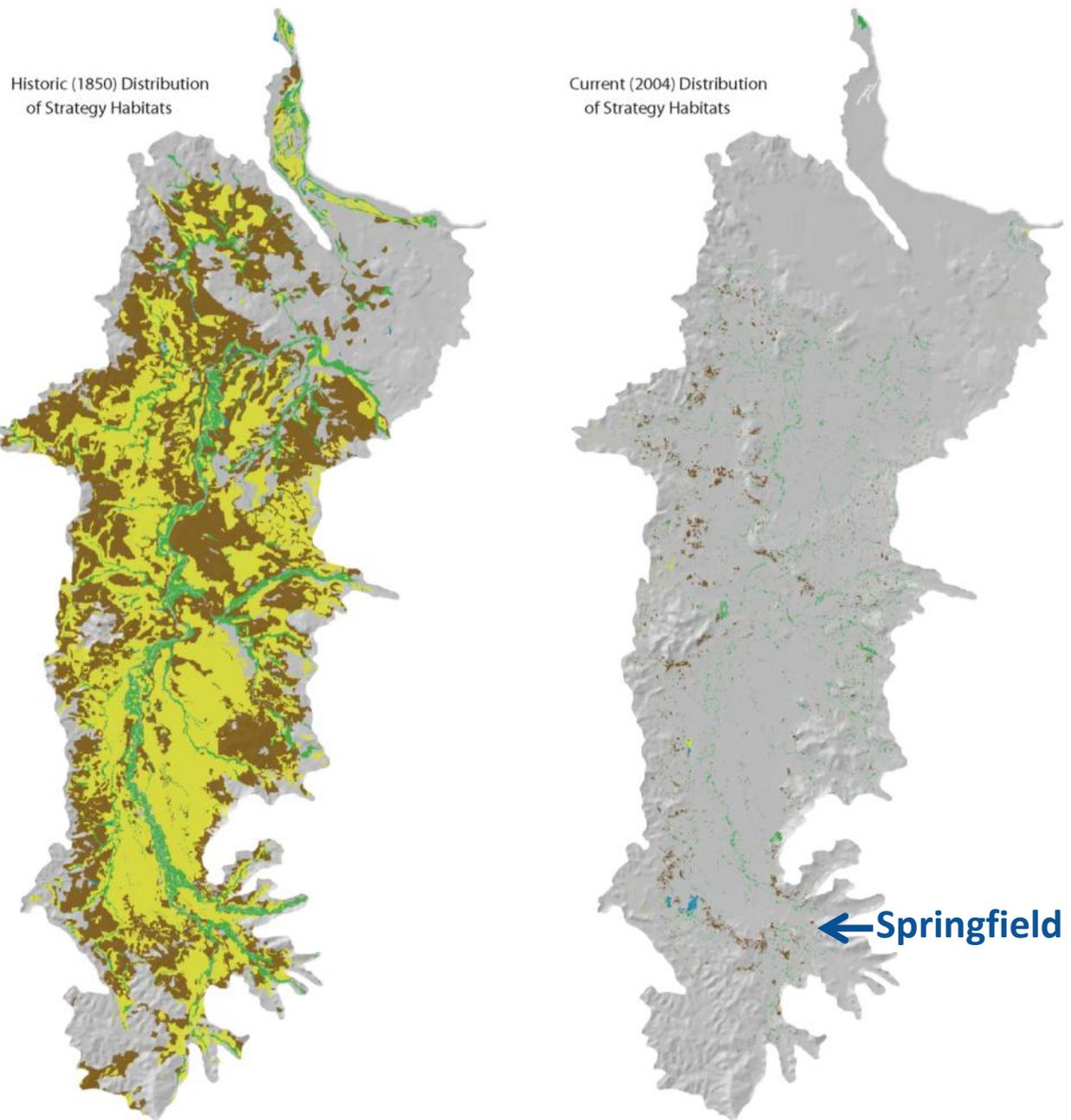
* Rare Habitat Type (Oregon Conservation Strategy Classification)

Table 2-1: Habitat Types

Habitat Type	Canopy	Description
Conifer Forest	71-100%	Forested areas associated with dry sites, with a minimum of 60% tree cover of coniferous species such as Douglas-fir. The understory typically consists of shade tolerant shrubs, ferns, and forbs.
Mixed Forest	71-100%	Forested areas associated with dry sites, with a mix of coniferous and deciduous trees (less than 60% of either type) and a shade tolerant understory.
Hardwood Forest	71-100%	Forested areas associated with dry sites, with a minimum of at least 60% tree cover of deciduous species such as maple or oak. The understory typically consists of shade tolerant shrubs, ferns, and forbs.
Conifer Woodland	31-70%	Woodland area dominated by coniferous species such as Douglas-fir and ponderosa pine, with some openings in the canopy. The understory typically consists of a mix of shade and sun tolerant shrubs, ferns, grasses, and forbs.
Mixed Woodland	31-70%	Woodland area with a mix of conifers and deciduous trees (less than 60% of either type) and a mix of shade and sun tolerant understory species.
* Oak Woodland	31-70%	Woodland area dominated by white or black oak with Douglas-fir, ponderosa pine, madrone, and maple often present. The understory typically consists of a mix of shade and sun tolerant shrubs, ferns, grasses, and forbs.
* Riparian	0-100%	Riparian habitats are those adjacent to rivers and streams or occurring on nearby floodplains. Riparian habitats are shaped and maintained through seasonal flooding, scour, and soil deposition and vary from sparsely vegetated areas to cottonwood gallery forests due to flood dynamics. Typical vegetation includes willow, Douglas-fir, alder, maple, cottonwood, snowberry, dogwood, spiraea, rushes, sedges, forbs and grasses.
* Savanna	6-30%	Savannas are associated with dry sites and/or frequent pre-settlement fires, with widely scattered trees. Typical tree species include white and black oak, ponderosa pine, and Douglas-fir with understory similar to prairie or grassland, with some shrubs present. Succession in the absence of fire or mowing tends to favor increased shrub and tree dominance over time.
* Wetland Forest/Woodland	31-100%	Wetland areas with tree cover present with a hydric soil tolerant understory of shrubs, grasses, forbs, sedges, and rushes. Oregon ash is the typical dominant tree species in these areas with Douglas-fir and willow often present. This category differs from riparian in that it is generally found on perched seasonal water tables and is less prone to disturbance due to flooding.
* Wetland Prairie/Vernal Pool	0-5%	Wet prairies and vernal pools historically covered large areas of the Willamette Valley and were maintained by a combination of wetland soil hydrology and frequent burning. Wetland prairies are dominated primarily by bunch grasses, rushes, and forbs and largely free of trees and shrubs. Vernal pools are characterized by freshwater inundation for much of the winter and spring, followed by dramatic lowering of the water table at the approach of summer. They are found in isolated small depressions with no inflow or outflow and typically dominated by annual forbs.
* Upland Prairie/Grassland	0-5%	Upland prairie/grassland occurs on well-drained soils and was maintained historically by frequent burning. Dominant native vegetation is perennial bunchgrasses with abundant and diverse forbs. Much of this habitat has been lost in the Willamette Valley and most remaining habitats have lost native diversity and are often dominated by non-native grasses.
* Herbaceous Balds and Bluffs	0-5%	Herbaceous balds and bluffs occur in the driest environmental settings within the Willamette Valley: generally south- to west-facing slopes on shallow or sandy/gravelly soils. They typically occur as isolated sites within a forest matrix, on steep slopes, rocky areas, or cliff faces. Vegetation is dominated by perennial bunchgrasses, forbs, ferns, lichens, and mosses. Scattered trees and shrubs may be present.
* Aquatic	0-5%	Freshwater aquatic habitats including rivers, streams, ponds, and marshes with water typically present throughout the year with aquatic and wetland vegetation present.

Ecological Setting Oregon Conservation Strategy

Change in Extent of Willamette Valley Strategy Habitats (1850 to 2004)



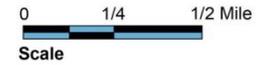
Strategy Habitats Types

- Grasslands
- Oak woodlands
- Riparian
- Wetlands and wet prairies

Natural Resource Areas Management Plan - Context Map

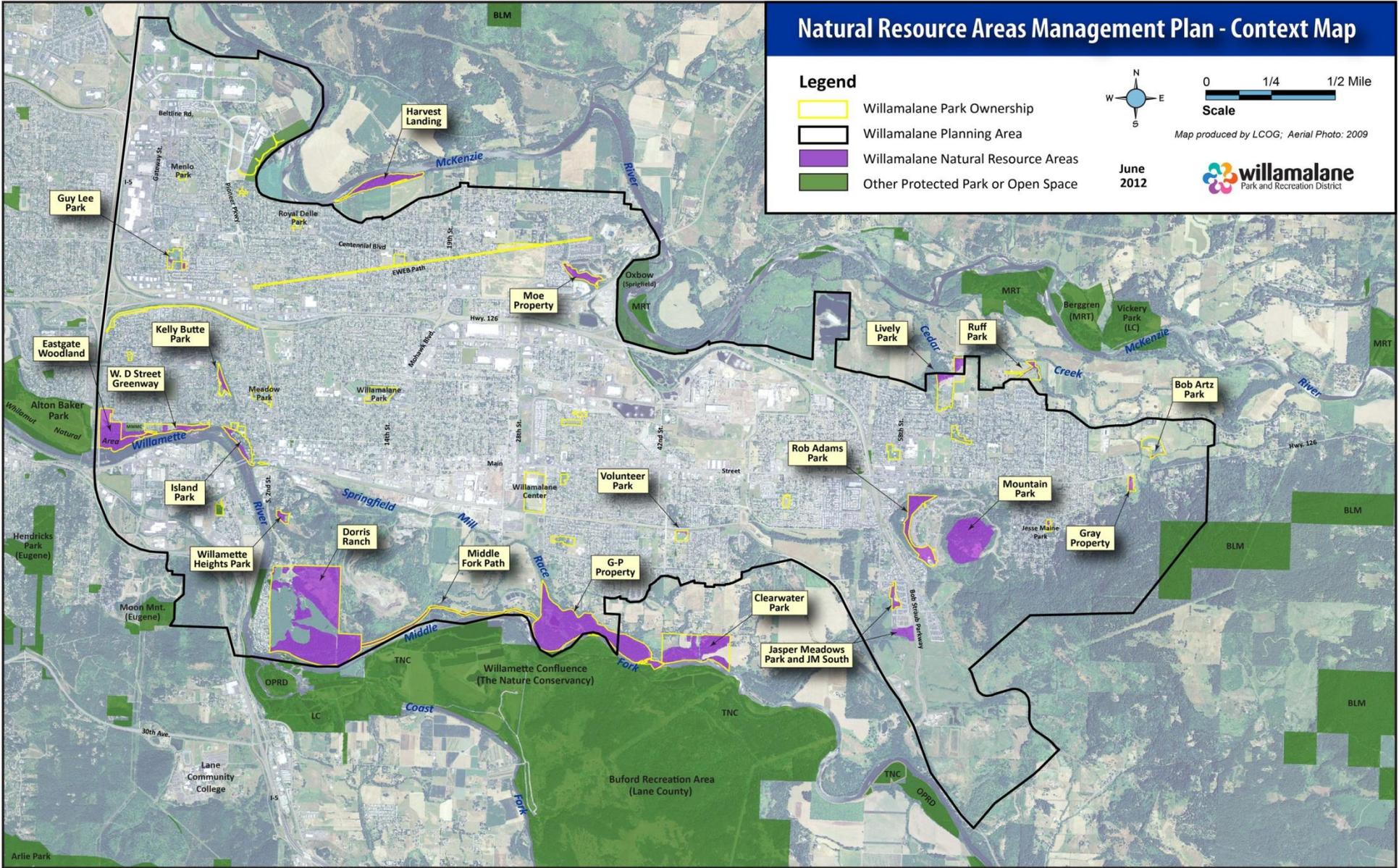
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June 2012



Regional Context

- Middle Fork Willamette River
- Main Stem Willamette River
- McKenzie River
- Other Dispersed

A mix of habitat types

Riparian



GP Property



West D Greenway



Eastgate Woodlands

Conifer Forest and Mixed Woodland



Lively Park



Rob Adams Park



Aquatic and Wetland Forest

Guy Lee Park



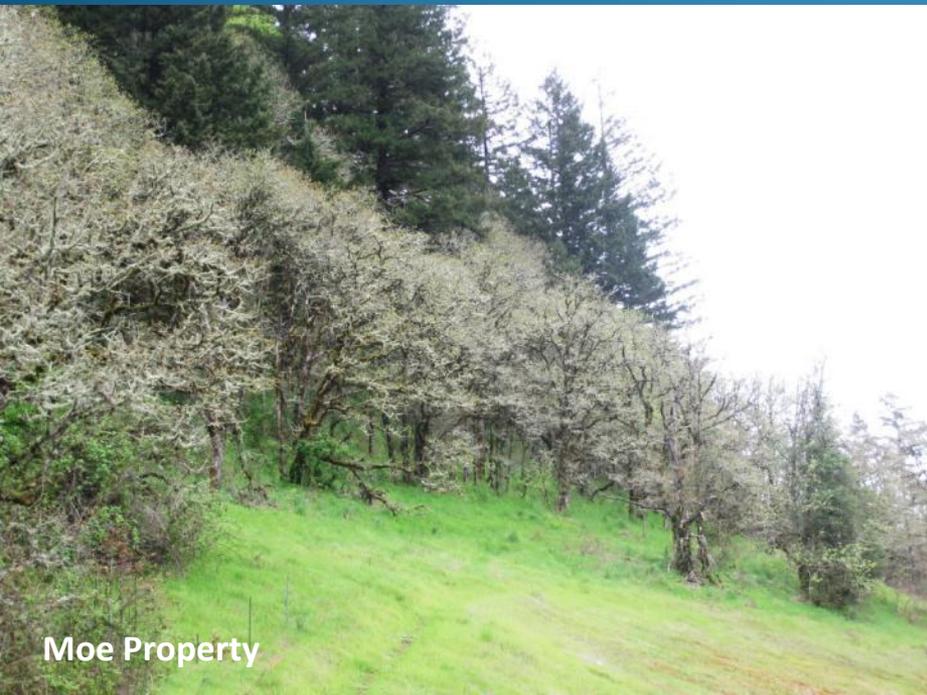
Savanna, Prairie, Oak Woodlands



Mountain Park



Jasper Meadows Park



Moe Property



Western bluebird



Newhouse

Showy tarweed (*Madia elegans*)

3.0 Natural Resource Areas

Function and Value Assessment

What makes the natural resource area valuable from a Willamalane perspective?

Table 3-1: Natural Resource Areas Function and Value Assessment Categories

I. Habitat Values	Possible Points
a. Size of natural area	0-3
b. Native vegetation cover	0-3
c. Habitat diversity (one point/type)	0+
d. Rare habitats	0 or 2
e. Rare plant or animal species present	0 or 2
f. Contiguity with other natural areas (based on size of adj. area)	0-4
II. Public Use and Visibility	Possible Points
a. Nature-based recreation (passive)	0-3
b. Educational use	0-3
c. Visibility and scenic value	0-3
d. Access and presence of trails	0-3
e. User experience	0-3
III. Ecosystem Services	Possible Points
a. Presence and permanence of water on site	0-3
b. Surface water quality function	0-3
c. Drinking water protection	0-4
d. Floodplain function	0-4
IV. Potential for Improvement of Natural Resource Area Function	Possible Points
a. Potential for habitat restoration or enhancement activities	0-4
b. Potential for recreation, education, or trails improvements	0-3
c. Potential for water quality related improvements	0-3

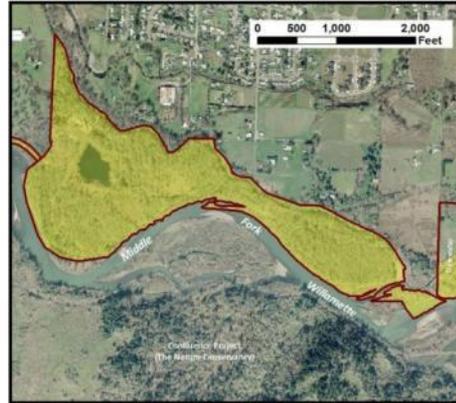
Natural Resource Area Descriptions and Assessment Scores

Method:

- Primarily Off-Site Assessment
- Aerial Photo Interpretation
- Existing Data
- Expert Knowledge (Willamalane Planning Team)

Georgia-Pacific Property (along the north side of the Middle Fork of the Willamette River)

The GP Property, which is primarily accessed by the public from the Middle Fork Path or the river, contains high quality riparian and aquatic habitats. The property is bordered by protected natural area on three sides.



Natural Resource Function and Value Assessment Scores

I. Habitat Values	Points	Notes
a. Size of natural area	3	119.7 acres
b. Native vegetation cover	2	Native vegetation dominant, but significant patches of non-native vegetation is present
c. Habitat diversity (one point/type)	2	Riparian and aquatic (pond and Mill Race)
d. Rare habitats	2	Riparian and aquatic
e. Rare plant or animal species	2	Chinook Salmon, Western Pond Turtle, Bull Trout (OBIC); Oregon Chub noted in the Mill Race.
f. Contiguity	3	Clearwater Park to east, Confluence property (TNC) to south

II. Public Use and Visibility	Points	Notes
a. Nature-based recreation (passive)	3	Bicycling, walking, jogging/running, nature study, fishing, nature play
b. Educational use	1	Currently only passive educational uses
c. Visibility and scenic value	2	Middle Fork Path facilitates consistent use
d. Access and presence of trails	3	Middle Fork Path
e. User experience	3	Solitude, views to river and adjoining natural areas

III. Ecosystem Services	Points	Notes
a. Presence /permanence of water	3	Middle Fork Willamette River, Springfield Mill Race, pond
b. Surface water quality function	3	Mature riparian forest along majority of waterways
c. Drinking water protection	4	Within 1 year TOT from wellhead
d. Floodplain function	4	Approximately 68 acres within mapped 100-year floodplain

IV. Potential	Points	Notes
a. Habitat restoration or enhancement	2	Riparian restoration and enhancement opportunities including riparian planting and invasive species control
b. Increased public use and enjoyment	2	Potential for additional trails, interpretive signage, mountain bike skills park, and accessible fishing area on pond
c. Water quality	1	Riparian planting opportunities in some areas along edge of pond, Middle Fork, and Mill Race

	Size of Natural Area (Acres)	a. Size (0-3)	b. Native veg. Cover (0-3)	c. Habitat diversity (0+)	d. Rare habitats (0 or 2)	e. Rare plants/animals (0 or 2)	f. Contiguity (0-4)	Sub Totals (up to 27 points possible)	a. Nature based recreation (0-3)	b. Educational use (0-3)	c. Visibility and scenic value (0-3)	d. Access and presence of trails (0-3)	e. User Experience (0-3)	Sub Total (up to 15 points possible)	a. Presence/permanance of water (0-3)	b. Surface WQ function (0-3)	c. Drinking water protection (0-4)	d. Floodplain function (0-4)	Sub Total (up to 56 points possible)	TOTAL: Sections I-III (56 points possible)	a. Habitat restoration/enhancemnt (0-4)	b. Recreation, education, trails (0-3)	c. Water quality related (0-3)	Sub Total (10 points possible)	TOTAL: All Sections (66 points possible)		
Natural Resource Area		I. Habitat Values							II. Public Use and Visibility					III. Ecosystem Services					IV. Potential								
Bob Artz Park	0.8	0	1	2	2	2	1	8	1	1	1	0	1	4	3	1	0	0	4	16	2	1	2	5	21		
Clearwater Park	43.7	2	2	2	2	2	3	13	3	2	2	3	3	13	3	3	3	3	12	30	2	3	1	6	22		
Dorris Ranch Living History Farm	173	3	2	6	2	2	3	18	3	3	3	2	3	14	3	3	0	4	10	42	2	3	1	6	48		
Eastgate Woodlands	39.8	2	2	3	2	2	3	14	3	2	3	3	3	14	3	3	0	3	9	37	2	1	1	4	20		
Georgia-Pacific Property	119.7	3	2	2	2	2	3	14	3	1	2	3	3	12	3	3	4	4	14	40	2	2	1	5	45		
Gray Property	2.6	1	1	1	2	0	0	5	0	0	2	0	0	2	0	0	0	0	2	7	3	2	0	5	12		
Guy Lee Park	1.7	0	1.5	2	2	0	0	5.5	1	2	2	2	1	8	2	1	1	1	5	18.5	2	2	1	5	23.5		
Harvest Landing Natural Area	22.4	2	2	2	2	2	0	10	2	1	2	1	2	8	3	3	4	3	13	31	1	1	0	2	33		
Island Park	5.8	1	2	2	2	2	3	12	3	2	3	3	2	13	3	2	0	3	8	33	2	2	1	5	38		
Jasper Meadows Park/JM South	13.1	1	3	2	2	0	0	8	2	2	2	2	1	9	2	1	0	0	3	20	2	3	2	7	27		
Kelly Butte Park	4.2	1	2	1	0	0	0	4	1	1	3	1	2	8	0	0	1	0	1	13	2	1	0	3	16		
Lively Park	8.7	1	2	4	2	2	0	11	2	2	2	2	2	10	3	2	4	1	10	31	2	3	1	6	37		
Middle Fork Path	15.3	2	2	1	2	2	3	12	3	1	3	3	3	13	3	3	4	3	13	38	1	1	0	2	40		
Moe Property	11.1	1	2	4	2	0	0	9	0	0	3	0	2	5	3	2	1	0	6	20	2	3	1	6	26		
Mountain Park	59.4	3	2	4	2	0	0	11	0	0	3	0	3	6	0	0	0	0	0	17	2	3	0	5	22		
Rob Adams Park	25.5	2	2	3	2	0	1	10	1	1	2	2	1	7	1	2	0	0	3	20	1	1	0	2	22		
Ruff Park	3.3	1	2	2	2	2	0	9	2	2	2	2	2	10	3	3	4	2	12	31	2	2	1	5	36		
Volunteer Park	0.9	0	2	1	2	0	0	5	2	2	2	2	1	9	2	1	1	0	4	18	0	1	1	2	20		
West D Street Greenway	10.0	3	2	2	2	2	3	14	3	1	3	3	3	13	3	2	0	2	7	34	1	1	0	2	36		
Willamette Heights Park Overlook	3.1	1	2	2	2	0	0	7	1	1	1	0	2	5	0	0	0	0	0	12	2	1	0	3	15		
Total Acres:	564.1																		Ave: 25.8					Ave: 30.1			

Function and Value Assessment Scores

4.0 Goals, Objectives and Recommended Actions/Strategies

Goal 1: Habitat Preservation, Restoration, and Enhancement

Goal 2: Ongoing Natural Resource Area Management

Goal 3: Ecosystem Services

Goal 4: Public Access and Nature-Based Recreation

Goal 5: Education, Stewardship, and Research

Goal 6: Natural Resource Area Planning

Goal 7: Monitoring and Mapping

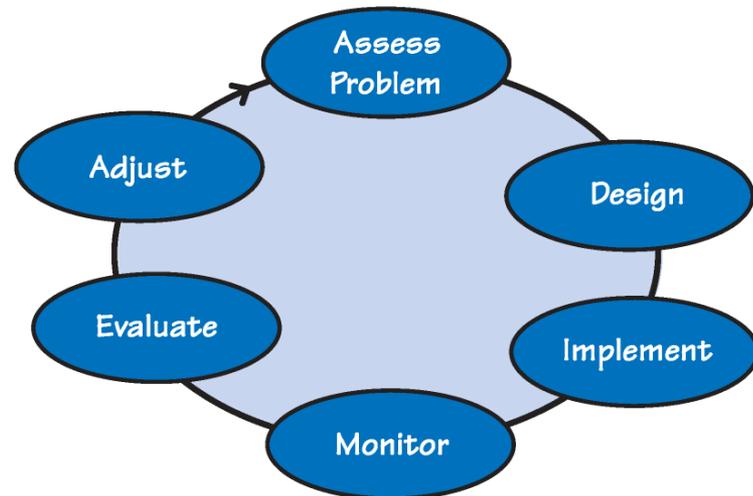
Goal 8: Future Habitat Preservation, Land Acquisition/Easements

Goal 9: Partnerships and Collaboration

5.0 Management Planning Guidelines

- Purpose (document, assess, specify management actions, enable adaptive management)
- Process (collaboration)
- Recommended Content
- Process for Addressing Unanticipated Issues and Conflicts

Adaptive Management Approach



6.0 Prioritization of Natural Resource Areas and Ongoing Management Actions

7.0 Guidance for Future Acquisition

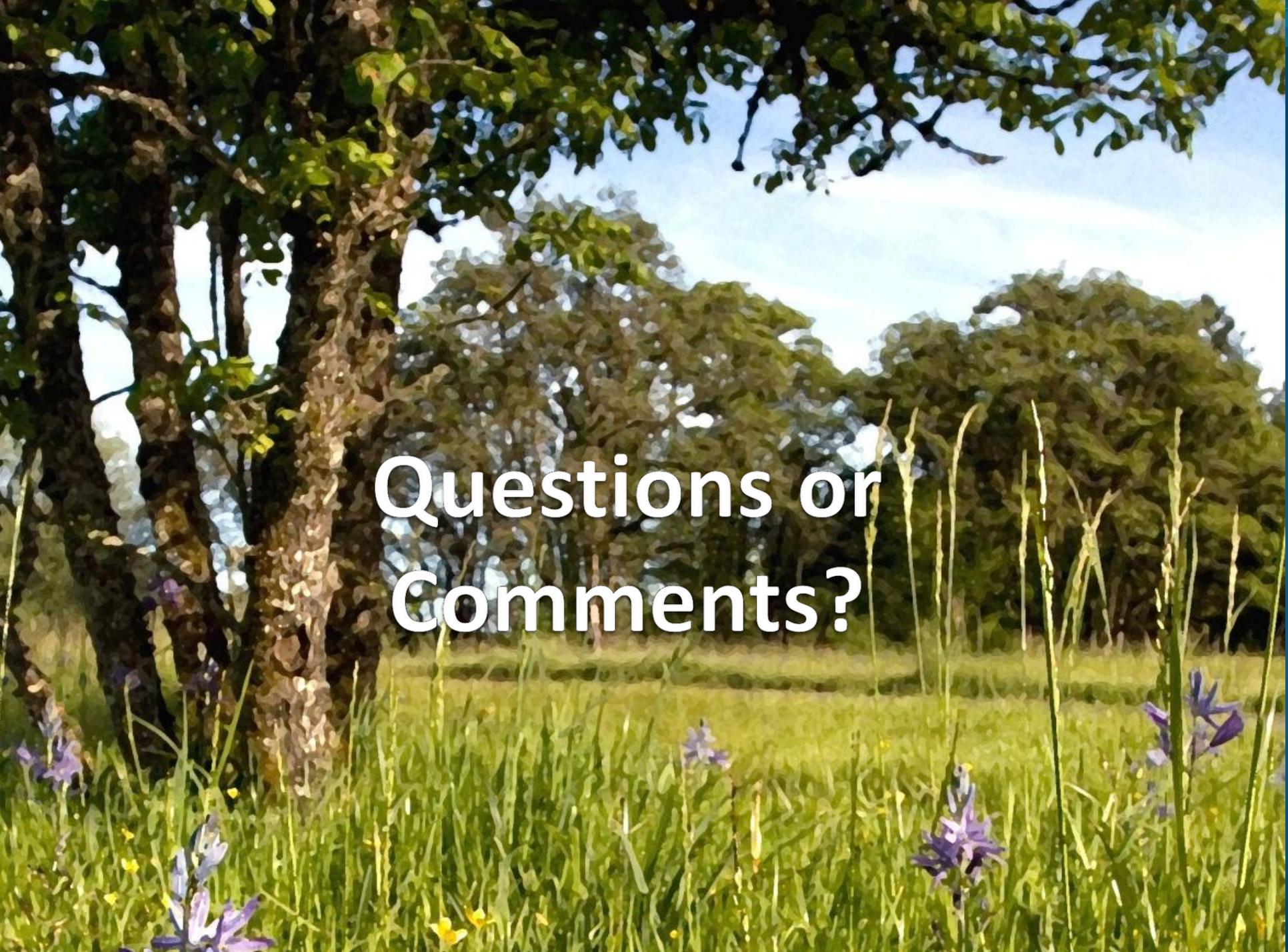
Criteria for Acquisition:

- Proximity/Connectivity
- Recreational/Educational Use
- Habitat Value
- Willing Seller
- Cost Effectiveness
- Land Use Compatibility
- Comp Plan Guidance
- Available Funding
- Presence of Hazards

Table 6-1: Relative Ranking of Natural Resource Areas

Rank*	Natural Resource Area	Existing Score (of 56 points)	Potential Score (of 10 points)	Combined Score (of 66 points)
1	Dorris Ranch Living History Farm	42	6	48
2	Georgia-Pacific Property	40	5	45
3	Clearwater Park	38	6	44
4	Eastgate Woodlands	37	4	41
5	Middle Fork Path	38	2	40
6	Island Park	33	5	38
7	Lively Park	31	6	37
8	West D Street Greenway	34	2	36
9	Ruff Park	31	5	36
10	Harvest Landing Natural Area	31	3	33
11	Jasper Meadows Park/JM South	20	7	27
12	Moe Property	20	6	26
13	Guy Lee Park	18.5	5	23.5
14	Rob Adams Park	20	2	22
15	Mountain Park	17	5	22
16	Bob Artz Park	16	5	21
17	Volunteer Park	18	2	20
18	Kelly Butte Park	13	3	16
19	Willamette Heights Park	12	3	15
20	Gray Property	7	5	12

*Rank is based on combined score

A scenic landscape featuring a large, leafy tree on the left side. The foreground is a lush green field with several purple flowers and tall grasses. In the background, a dense line of trees stretches across the horizon under a clear blue sky. The text "Questions or Comments?" is overlaid in the center of the image.

Questions or
Comments?